

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of) DOCKET NO. 2008-0303
)
HAWAIIAN ELECTRIC COMPANY, INC.)
HAWAII ELECTRIC LIGHT COMPANY, INC.)
MAUI ELECTRIC COMPANY, LIMITED)
)
For Approval of the Advanced)
Metering Infrastructure (AMI))
Project and Request to Commit)
Capital Funds, to Defer and Amortize)
Software Development Costs, to Begin)
Installation of Meters and Implement)
Time-of-Use Rates, for Approval)
of Accounting and Ratemaking)
Treatment, and Other Matters.)

PUBLIC UTILITIES
COMMISSION

2009 AUG -7 P 3:27

FILED

LIFE OF THE LAND'S
INFORMATION REQUESTS TO
HAWAIIAN ELECTRIC COMPANY

&

CERTIFICATE OF SERVICE

HENRY Q CURTIS
VICE PRESIDENT FOR CONSUMER ISSUES

KAT BRADY
VICE PRESIDENT FOR SOCIAL JUSTICE

LIFE OF THE LAND
76 North King Street, Suite 203
Honolulu, HI 96817
phone: 808-533-3454
henry.lifeoftheland@gmail.com

LOL-IR-1 re: "A new awareness of electricity consumption (made possible by the AMI system) will ultimately modify customer behavior - in a similar fashion to drivers, who have purchased automobiles with real-time displays of fuel consumption, which some have coined the 'Prius-effect.'" (HECO T-1, 2:13-17) What percent of Hawai'i drivers drive (1) a Prius; (2) an SUV?

LOL-IR-2 re: "to begin installing, on a first-come, first-served basis" (HECO T-1, 4:10) (a) What other prioritization schemes did HECO examine? (b) Which approach would maximize (1) system reliability; (2) system security; and (3) minimize greenhouse gas emissions

LOL-IR-3 re: "approval of the Advanced Metering Infrastructure Equipment and ' Services Agreement ("Sensus Agreement") between the Hawaiian Electric Company, Inc. and Sensus Metering Systems, Inc. ("Sensus") including its terms and conditions and a finding that the arrangement is prudent and in the public interest" (HECO T-1, 5:3-7) How can these contracts be in the public interest if the public can't read them and show an interest in them?

LOL-IR-4 re: "AMI will improve the accuracy, timeliness and cost efficiency of billing information" (HECO T-1, 5:19-20) Do you mean that less loss will occur and therefore ratepayers will be paying for a greater percentage of the total electricity produced?

LOL-IR-5 re: "customers will have greater confidence in the bills they receive" (HECO T-1, 5:21) (a) What makes you think that customers distrust or aren't confident about existing bills? (b) Should customers not have confidence in existing bills?

LOL-IR-6 re: "The availability of recent energy usage information will also empower customers to make more intelligent energy decisions" (HECO T-1, 5:21-23) (a) What is the elasticity of energy use, that is, the differential of use over price. (b) Are you referring some to other elasticity, and if so, which one and why?

LOL-IR-7 re: "In-home and embedded appliance devices becoming available in the marketplace allow customers to view consumption information almost immediately" (HECO T-1, 6:2-4) (a) Is it likely that the only those who use embedded appliance devices be the ones who take advantage of the AMI? (b) Which approach (in-house, meter info) would have a greater impact at reducing demand and peak demand? (c) Which one is more cost effective for those who would use both? (d) Which one has a greater impact on ratepayers who choose to do neither?

LOL-IR-8 re: "ability of the AMI Network to control devices or appliances at the customer's premises" (HECO T-1, 6:5-6) Which appliances will HECO be able to control initially? (b) over the current 20-year utility planning horizon, what appliances might HECO be able to control?

LOL-IR-9 re: "an important tool to support the integration of increased levels of renewable and distributed generation energy sources into the Companies' grids". (HECO T-1, 6:7-8) Can AMI be implemented while the percentage of renewables on the grid is (a) going down; (b) remaining the same. (c) Which utilities have implemented AMI while the percentage of renewables was (1) increasing (2) remaining relatively constant (3) decreasing?

LOL-IR-10 re: "The AMI Project proposed by the Hawaiian Electric Companies will help to usher in a clean energy future for Hawaii" (HECO T-1, 6:17-18) (a) Please define "clean energy"; (b) have any utilities increased their use of renewables without AMI? (c) Since HELCO has 6 times the percentage of renewables as HECO, couldn't HECO vastly increase its use of renewables without resorting to AMI? (d) Which renewable would be able to sharply increase penetration levels due to AMI that they would not achieve without AMI?

LOL-IR-11 re: "Act 155 requires that the energy-efficiency portfolio standards be designed to achieve 4,300 GWh of electricity use reductions statewide by 2030" (HECO T-1, 7:11-13) At a recent meeting Estrella Seese stated that the 4300 GWh was determined by using the HECO IRP-3 data ending in 2025 and then pushing it out to 2030 by using the HECO data from 2020-25. (a) Is this your understanding? (b) If not, what is your understanding? (c) Has more recent information shown that the HECO IRP-3 forecast was accurate? (d) What is the current deviation between that forecast and the current data?

LOL-IR-12 re: "AMI also supports many of Hawaii's other and/or related clean energy objectives including the Smart Grid, the greening of transportation, demand response programs, pricing principles and programs, distributed generation, distributed energy storage, net energy metering and investment in infrastructure." (HECO T-1, 8:8-12) How specifically does AMI support (a) distributed generation; (b) storage; (c) net energy metering? (d) Doesn't HECO plan to convert all net energy metering systems to some other program? (e) How does HECO define "the greening of transportation"? (f) Are you broadening this docket to consider its impacts on the Smart Grid, the greening of transportation, demand response programs, pricing principles and programs, distributed generation, distributed energy storage, net energy metering and investment in infrastructure

LOL-IR-13 re: "The Companies are in the process of finalizing a request for proposals ("RFP") for consulting services to complete a Smart Grid roadmap and through the RFP process, will select a firm to develop individualized roadmaps charting a Smart Grid course for each of the Companies." (HECO T-1, 8:16-20) (a) When will HECO roll out its Smart Grid roadmap? (b) How will individual Smart Grid roadmaps differ?

LOL-IR-14 re: "the technology has rapidly evolved" (HECO T-1, 8:24) In a period of rapid change, shouldn't one wait to see who the winners and losers are before jumping into the fray?

LOL-IR-15 re: "AMI Networks in particular have moved to the forefront as a key Smart Grid enabling technology" (HECO T-1, 9:2-3) Where were they before they jumped to the forefront?

LOL-IR-16 re: "vendors have responded enthusiastically by a near explosive expansion of product offerings" (HECO T-1, 9:4-5) In a period of rapid change, shouldn't one wait to see who the winners and losers are before jumping into the fray?

LOL-IR-17 re: "Ultimately, an AMI system will also help to increase the utilization of renewable energy resources." (HECO T-1, 9:19-20) How long until ultimately occurs?

LOL-IR-18 re: "The Consumer Advocate, the Hawaii Renewable Energy Alliance, the Hawaii Solar Energy Association and Life of the Land, as well as the Commission's consultant, the National Regulatory Research Institute, have provided valuable insight and views on many aspects of the Companies' proposed AMI Project, including the selection of an optimal AMI system." (HECO T-1, 9:21-25) What specific parts of HECO's proposal come from the insight provided by (a) The Consumer Advocate? (b) Hawaii Renewable Energy Alliance? (c) Hawaii Solar Energy Association? (d) Life of the Land? And (e) the National Regulatory Research Institute

LOL-IR-19 re: "Approval of the proposed AMI Project will create an opportunity to move forward on clean energy objectives by bringing "smart" capabilities and programs to life" (HECO T-1, 10:5-7) Does that mean that in the past un-smart and/or dumb capabilities and programs (a) existed? (b) were promoted? (c) came to life?

LOL-IR-20 re: TESTIMONY (T-100, page 2) Did the witness also offer formal testimony in a public hearing held by the Board of Land and Natural Resources?

LOL-IR-21 re: "AMI meters and components of the AMI Network will be installed on the islands of Oahu, Maui and Hawaii." (HECO T-2, 2:21-22) Does it seem fair that Lanai and Molokai residents each get 200MW of wind for O`ahu customers, but then do not get the benefit of AMI?

LOL-IR-22 re: "These schedules are planning estimates and will need to be adjusted if steps required to move forward such as Commission approval and MDMS development require more time." (HECO T-2, 3:16-18) Do you plan on delaying this docket or was this docket prematurely opened?

LOL-IR-23 re: "All of the advanced meters will have the capability to capture interval meter reads at configurable intervals (such as 15-minute or one-hour)" (HECO T-2, 4:2-3) (a) What is the minimum time interval that could occur utilizing this system? (b) Why not take readings every 5 seconds?

LOL-IR-24 re: "The Companies would install utility-owned Sensus iConA residential meters and Elster C&I meters equipped with Sensus FlexNet radio boards." (HECO T-2, 4:19-21) (a) Why or why wasn't competitive bidding used in this proposal? (b) Would Competitive Bidding have resulted in a lower price?

LOL-IR-25 re: "The Smart Grid promises unparalleled capabilities in monitoring, controlling, optimizing and automating the restoration of the electric power delivery system." (HECO T-2, 6:7-9) (a) Does that imply that those controlling the system will have unparalleled opportunities to monitor and control those receiving power? (b) Wouldn't another approach, perhaps more Republican in nature, focus on allowing individuals and companies to decrease their energy use without having Big Brother having access to all sorts of private information?

LOL-IR-26 re: "Collectively, AMI and DR offer important alternatives, in addition to renewable energy, to help address global energy supply and environmental issues." (HECO T-2, 6:9-11) (a) Does AMI and DR reduce the average cost of electricity by making its use more efficient? (b) If the cost of business drops, then, utilizing a simply supply-demand curve, wouldn't output (number of units) increase? (c) Which is greater: the drop in average use of electricity, or the increased electrical use from increasing output?

LOL-IR-27 re: "In short, the implementation of AMI is being driven by significant developments in the evolution and availability of AMI-related technologies" (HECO T-2, 6:12-13) Will AMI be driven in large amounts by the changes in technology that are developed in the next few years?

LOL-IR-28 re: "In short, the implementation of AMI is being driven by ... AMI'S increasing popularity on the U.S. mainland" (HECO T-2, 6:12-14) (a) Should we decide how popular an issue is on the Mainland to determine whether we should do it here? (b) How much weight should we give to Mainland popularity? (c) Should Mainland popularity help determine whether we implement in Hawaii various things such as wheeling, Independent System Operators (ISOs) and AMI? (d) Doesn't HECO constantly say we are not the Mainland, we are different? (e) Has your position changed in this regard? (f) Are you arguing both sides of this issue?

LOL-IR-29 re: "In short, the implementation of AMI is being driven by ... uncertainty in the future price of fuel." (HECO T-2, 6:12-15) (a) When did the price of fuel become volatile? (B) Didn't HEI make this same argument in "Alternative Energy Development" filed with the State Legislature in 1994?

LOL-IR-30 re: "AMI has - particularly in recent years - received wide support at both state and federal levels." (HECO T-2, 6:15-16) What kinds of opposition to AMI and Smart Grids has arisen in the past few years.

LOL-IR-31 re: "The Companies' specific objectives with respect to the AMI project are: ... (2) provide 15-minute or one-hour interval data to customers" (HECO T-2, 6:21-22) Why was this information labeled CBI (subject to Protective Order) in HECO's initial application?

LOL-IR-32 re: "The advanced meters selected by the Hawaiian Electric Companies can be configured to provide as low as 5-minute interval data." (HECO T-2, 6: footnote 2) How much added cost would be needed to reconfigure the Ami to get readings in shorter time intervals?

LOL-IR-33 re: "The Companies proposed the AMI project as a first step in a broader Smart Grid initiative" (HECO T-2, 8:13-14) Will any part of AMI be installed on (a) County property? (b) State property? (c) Federal Property?

LOL-IR-34 re: "A credible argument can be made that there is a constant evolution in AMI technologies and that waiting for the ultimate solution will cause a delay in obtaining significant customer benefits." (HECO T-2, 17:14-16) (a) In conducting due diligence to evaluate the relative values of diving right in or holding off for a year or two during this period of enormous changes in AMI and Smart Grid technologies and products, what specific criteria did HECO use? (b) What value or weight did HECO give to each criterion? (c) Why?

LOL-IR-35 re: "The Consumer Advocate contends that the Hawaiian Electric Companies' decision to abstain from using a bidding process does not cast a favorable light on the determination that the project costs are reasonable. The Hawaiian Electric Companies have provided substantial technical details and an AMI financial model which includes all the assumptions and cost estimates employed by the Hawaiian Electric Companies as well as the entire Sensus Agreement for review by the parties to this docket." (HECO T-2, 20:3-9)

LOL-IR-36 re: "The Companies' cost estimates were developed by gathering and evaluating information from vendors, consultants, pending contracts and historical experience." (HECO T-3, 1:16-19) (a) What specific historical sources did you research?

LOL-IR-37 re: "TOU rate options are available for all Hawaiian Electric customers, as approved in Hawaiian Electric's 2005 test year rate case (Docket No. 04-0113). Similar TOU options are proposed in the currently open HELCO 2006 test year rate case (Docket No. 05-0315) and MECO 2007 test year rate case (Docket No. 2006-0387)." (HECO T-7, 2:3-7) Can you please spell out the specifics for each utility?

LOL-IR-38 re: "The Hawaiian Electric Companies' proposals for TOU rate options are reasonable because they are based on rate case costs (Hawaiian Electric 2009 test year, HELCO 2006 test year and MECO 2007 test year), and the proposed TOU rate designs have been agreed upon in settlement agreements by all parties to those respective rate cases. These rate options provide to customers an opportunity to shift load as a tool to manage their electric bills." (HECO T-7, 4:8-13) Would HECO be open to having non-profits, trade groups, and non-HECO utility companies intervene in Time Of Use Rate dockets?

LOL-IR-39 re: "The Hawaiian Electric Companies have not studied the difference in participation rate and peak demand reduction between TOU rate implementations that are opt-in, opt-out, or mandatory." (HECO T-7, 9:13-15) Why?

LOL-IR-40 How specifically will AMI lead to Peak Shaving?

CERTIFICATE OF SERVICE

The foregoing Life of the Land Information Requests was served on the date of filing by mail, postage prepaid and property addressed to the following:

CARLITO CALIBOSO, CHAIR (original plus 8 copies)
PUBLIC UTILITIES COMMISSION
465 S. King St, Room 103
Honolulu, HI 96813

CATHERINE P. AWAKUNI (2 copies)
EXECUTIVE DIRECTOR
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS
DIVISION OF CONSUMER ADVOCACY
P. O. Box 541
Honolulu, HI 96809

DEAN K. MATSUURA (1 copy)
MANAGER, REGULATORY AFFAIRS by hand delivery
HAWAIIAN ELECTRIC COMPANY, INC.
P.O. Box 2750
Honolulu, Hawaii 96840-0001


THOMAS W. WILLIAMS, JR., ESQ.
DAMON L. SCHMIDT, ESQ.
GOODSILL ANDERSON QUINN & STIFEL
Alii Place, Suite 1800
1099 Alakea Street
Honolulu, HI 96813

Counsel for HECO COMPANIES

WARREN S. BOLLMEIER II
PRESIDENT
HAWAII RENEWABLE ENERGY ALLIANCE
46-040 Konane Place, #3816
Kaneohe, HI 96744
Certificate of Service
Page 2

MARK DUDA
PRESIDENT
HAWAII SOLAR ENERGY ASSOCIATION
P. O. Box 37070
Honolulu, HI 96837
1099 Alakea Street
Honolulu, Hawaii 96813

DATED: AUGUST 7, 2009 in Honolulu, Hawaii


HENRY Q. CURTIS
VICE PRESIDENT FOR CONSUMER ISSUES